Draft 2011 Basin Highlights Report & State of the State o





Red and Canadian River Basins Vicinity Map





Surface Water Quality

The Federal Clean Water Act – Sections 305(b) & 303(d)

The Environmental Protection Agency (EPA)

The State of Texas

Texas Commission on Environmental Quality (TCEQ)

The Texas Water Quality Integrated Report For Clean Water Act Sections 305(b) and 303(d)

Surface Water Quality Monitoring Team (SWQM)
Continuous Water Quality Monitoring Team (CWQM)
Total Maximum Daily Load Team (TMDL)
Clean Rivers Program Partners (CRP)
The Red River Authority of Texas

Data and Information Used in the Basin Highlights Report

The Stakeholder

Red River Authority of Texas www.rra.dst.tx.us

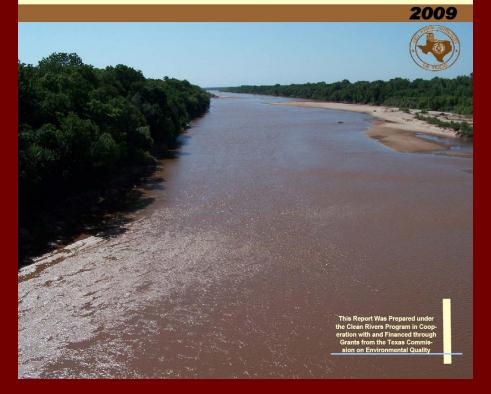
Texas Commission on Environmental Quality (TCEQ) www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wqm/mtr/index.html

United States Geological Service (USGS) http://waterdata.usgs.gov/tx/nwis/rt

Water Quality in the Red River Basin

SUMMARY REPORT of the

Canadian and Red River Basins



"Water resources within the Red River Basin are generally good and support a hearty and robust aquatic life with respect to stream standards."

2009 Basin Summary Report



Water Quality Parameters Requiring Attention

Dissolved Salts

Aquatic Health

Total Dissolved Solids

Low Dissolved Oxygen

Chlorides

Nutrient Enrichment

Human/Wildlife Health

Ammonia

Chlorophyll a

Nitrates

Total Phosphorous

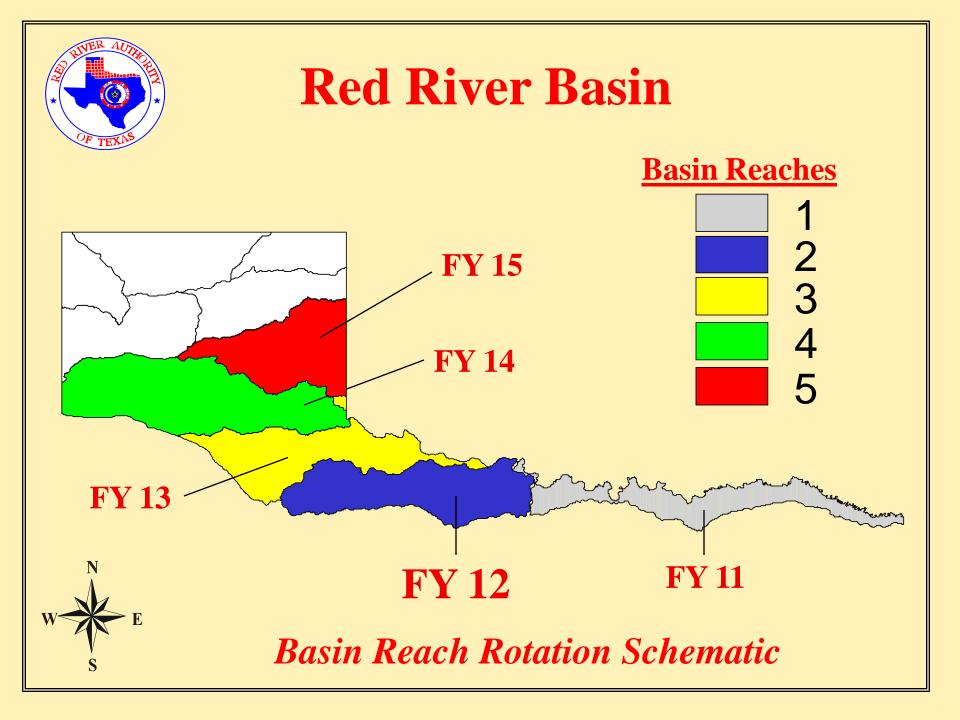
Ortho-Phosphorous

Bacteria – E. coli

Weather?
Drought, Floods, & Blizzards

Water Quality Monitoring in the Red River Basin

| ENTITY | <u>FY 11</u> |
|---------------------------------|--------------|
| RRA | 33 |
| TCEQ | 20 |
| USGS | 30 |
| City of Sherman | 7 |
| Total Stations Monitored | 90 |





Red River Basin Lower Reach I



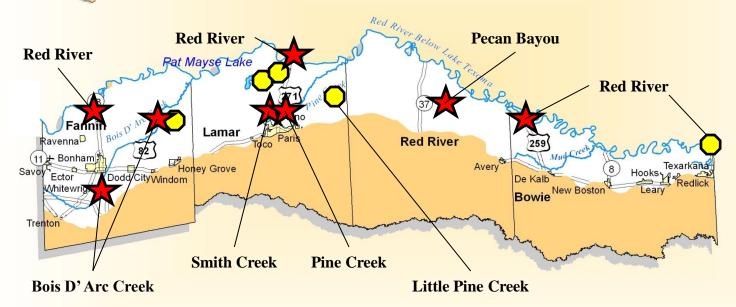
2008 TWQI & Draft 2010 IR

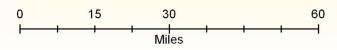


Impairments - Bacteria & Low Dissolved Oxygen

Concerns - Manganese in Sediment, Chlorophyll-a, Total Phosphorous, Ortho-phosphorous, Ammonia, & Low Dissolved Oxygen







OCoordinated Monitoring Efforts





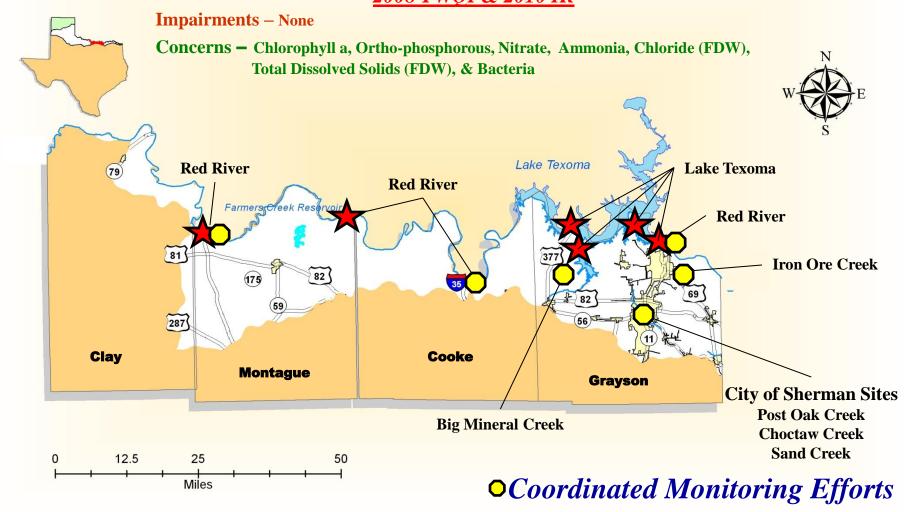




Red River Basin Upper Reach I



2008 TWOI & 2010 IR





Lake Texoma @ Denison Dam







Red River Basin Reach II

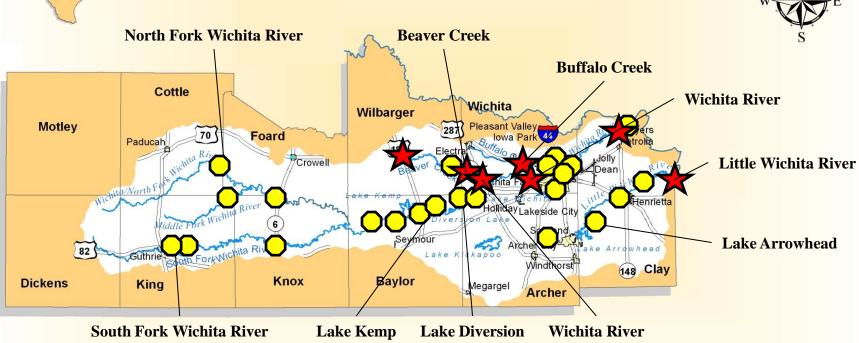


2008 TWQI & 2010 IR



Impairments - Low Dissolved Oxygen, Bacteria, & Chloride

Concerns - Chlorophyll a, Total Phosphorous, Ortho-phosphorous, Nitrate, Ammonia, Bacteria, & Low Dissolved Oxygen



• Coordinated Monitoring Efforts



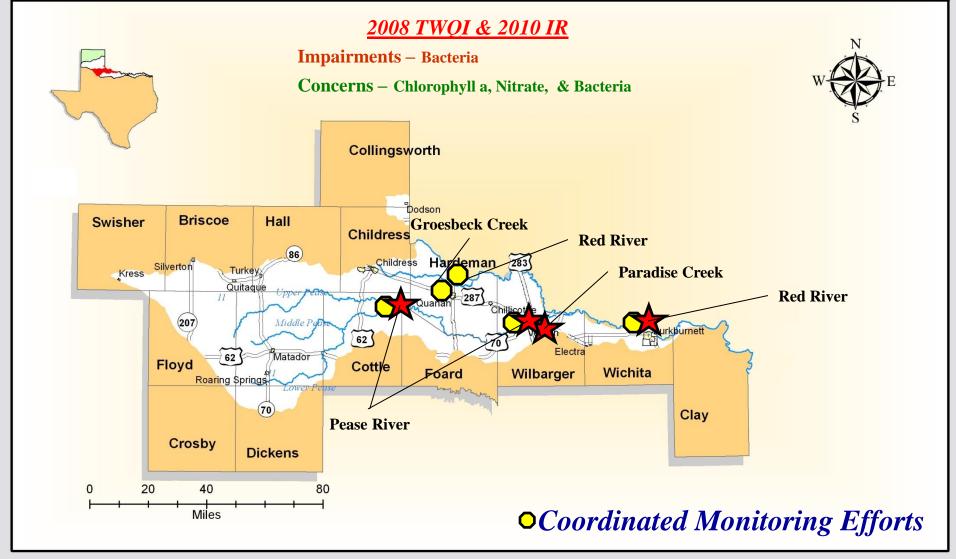






Red River Basin Reach III











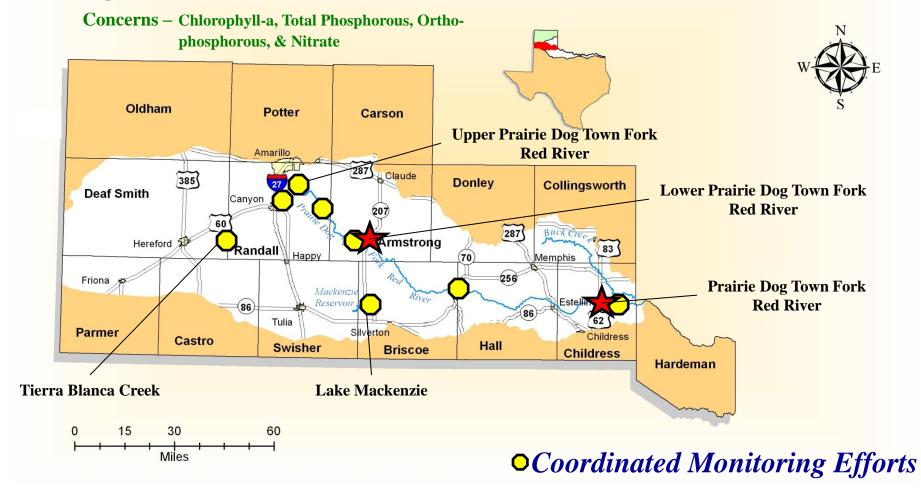


Red River Basin Reach IV



2008 TWQI & Draft 2010 IR

Impairments – Bacteria & pH





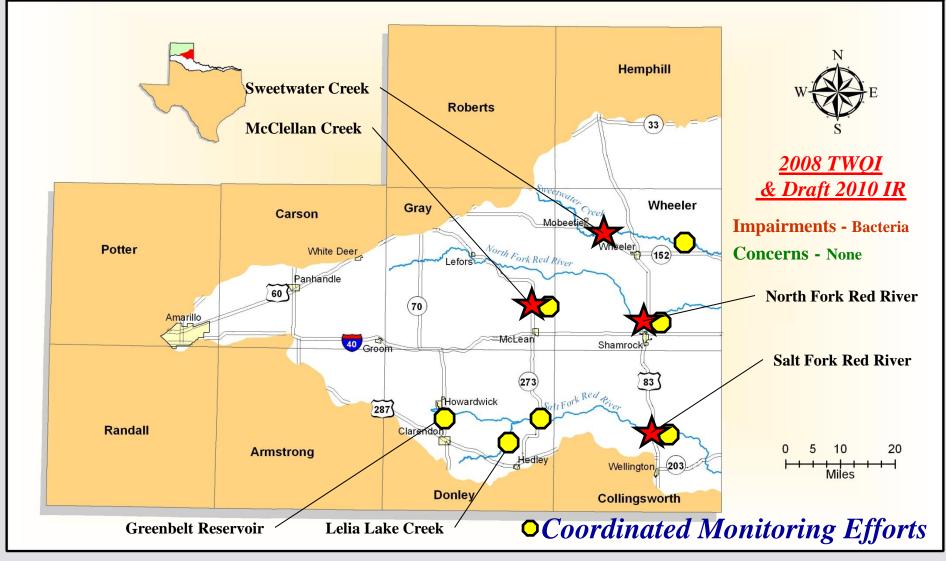






Red River Basin Reach V









The Future of Water Quality Monitoring

Watershed Action Planning Process

Management Tool - To coordinate the planning, facilitation, and tracking of actions to address water quality issues.

<u>Numerous Agencies</u> – TCEQ Water Programs, River Authorities, CRP Partners, TSSWCB, and other interested entities.

Local Watershed Discussions

Characterize the Watershed – Who knows what!

<u>Identify</u> – Research, funding capabilities, and potential stakeholders.

<u>Recommendations</u> – What needs to be done!

QUESTIONS OR COMMENTS



www.rra.dst.tx.us